Warm-Up February 11, 2019

A. $3x - 4 = 2(-3x + 5)$

$3x - 4 = -6x + 10$

$3x + 6x - 4 = -6x + 6x + 10$

$9x - 4 = 10$

$9x - 4 + 4 = 10 + 4$

$\frac{9x}{9} = \frac{14}{9}$ $x = \frac{14}{9} = 1\frac{5}{9}$

$$4x + 3 = 7x$$

$$4x - 7x + 3 = 7x - 7x$$

$$-3x + 3 = 0$$

$$-3x + 3 - 3 = 0 - 3$$

$$-3x = -3$$

$$\frac{-3x}{-3} = \frac{-3}{-3}$$

$$x = 1$$

25 minutes...Assignment

1:30

$\frac{4x}{5} + 2 = 3$

$\frac{4x}{5} + 2 - 2 = 3 - 2$

$\frac{4x}{5} = 1$

Solving equations with fractions....clear the fractions!!! Multiply each term by LCM

[lowest common multiple]

LCM:

2, 4, 6, 8, 10 ...

3, 6, 9, 12 ...

$\frac{(6)1x}{2} + \frac{(6)1x}{3} = \frac{(6)}{10}$

$\frac{6x}{2} + \frac{6x}{3} = 60$

$3x + 2x = 60$

$\frac{5x}{5} = \frac{60}{5}$

$x = 12$

LCM:
3, 6, 9, 12, 15...
4, 8, 12...

$\frac{2}{3}x+9=\frac{3}{4}x-6$

$\frac{2x}{3}+9=\frac{3x}{4}-6$ (12) (12) (12) (12)

$\frac{24x}{3}+108=\frac{36x}{4}-72$

$8x+108=9x-72$

$8x-9x+108=9x-9x-72$

$-1x+108=-72$

$-1x+108-108=-72-108$

$-1x=-180$

$\frac{-1x}{-1}=\frac{-180}{-1}$

$x=180$

LCM:

$$\frac{2a}{3} = \frac{4a}{5} + 7$$

(15) (15) (15)

$$\frac{30a}{3} = \frac{60a}{5} + 105$$

$$10a = 12a + 105$$

$$10a - 12a = 12a - 12a + 105$$

$$\frac{-2a}{-2} = \frac{105}{-2}$$

$$a = -\frac{105}{2}$$

$$-52\tfrac{1}{2}$$

LCM=

$$\frac{2x}{3}+\frac{11}{4}=3-\frac{11x}{6}$$

(12) (12) (12) (12)

$\frac{24x}{3} + \frac{132}{4} = 36 - \frac{132x}{6}$

$8y + 33 = 36 - 22x$

$8x + 22x + 33 = 36 - 22x + 22x$

$30x + 33 = 36$

$36x + 33 - 33 = 36 - 3$

$\frac{30x}{30} = \frac{3}{30}$

$x = \frac{1}{10}$